

## **REMARKS**

### **I. Introduction**

Claims 16 to 30 are pending in the present application. In view of the foregoing amendments and the following remarks, it is respectfully submitted that all of the presently pending claims are allowable, and reconsideration is respectfully requested.

Applicants note with appreciation the acknowledgment of the claim for foreign priority and the acknowledgment that all certified copies of the priority documents have been received.

### **II. Rejection of Claims 16, 17, 22, and 23 Under 35 U.S.C. § 102(b)**

Claims 16, 17, 22, and 23 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 4,875,981 ("Usami et al."). It is respectfully submitted that Usami et al. does not anticipate the present claims for at least the following reasons.

To anticipate a claim, each and every element as set forth in the claim must be found in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of Calif., 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). That is, the prior art must describe the elements arranged as required by the claims. In re Bond, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). In other words, to be anticipatory, a single prior art reference must show all of the limitations of the claims arranged or combined in the same way as recited in the claims. Net Moneyin, Inc. v. Verisign, Inc., 545 F.3d 1359 (Fed. Cir. 2008). To the extent the Examiner is relying on the doctrine of inherent disclosure in support of the anticipation rejection, the Examiner must provide a "basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied art." (See M.P.E.P. § 2112; emphasis in original; see also Ex parte Levy, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990)). Thus, the M.P.E.P. and the case law make clear that simply because a certain result or characteristic may occur in the prior art does not establish the inherency of that result or characteristic.

Claim 16 relates to a sensor element for determining a concentration of a target gas component in a gas mixture, including, *inter alia*, the features of a *second cavity formed in the solid electrolyte body on an opposite side of the solid electrolyte body from the first cavity, the electrical resistance heater being situated between the first cavity and the second cavity*. Support for the amendments may be found in the Substitute Specification, e.g., at page 7, lines 3 to 6, 11 to 13, and 25 to 28; page 8, lines 3 to 8; and Figures 1 to 5.

Usami et al. does not disclose, or even suggest, all of the claimed features of claim 16. The Office Action at page 3 asserts that air passage 26 of Usami et al. constitutes the feature of a second cavity. However, the air passage 26 of Usami et al. contains the reference electrode 14. (Usami et al., col. 6, lines 38 to 47; and Figures 1, 2, and 6). However, the air passage 26 of Usami et al. does not constitute a second cavity. Further, the air passage 26 of Usami et al. is not formed on an opposite side of the solid electrolyte body from the first cavity, nor is a heater 28, 30 of Usami et al. situated between the first cavity and the second cavity. In direct contrast, the heaters 28, 30 of Usami et al. are formed at opposite sides of the solid electrolyte body. Therefore, Usami et al. does not disclose, or even suggest, the features of a *second cavity formed in the solid electrolyte body on an opposite side of the solid electrolyte body from the first cavity, the electrical resistance heater being situated between the first cavity and the second cavity*.

The Office Action contends that, with reference to Figure 2 of Usami et al., “it is inherent that the heater has a meander shape since it is extended along the length of the sensor element 2.” This contention is entirely untenable and is apparently based on speculation or conjecture, which cannot sustain an anticipation rejection, particular one based on the doctrine of inherency.

Accordingly, Usami et al. does not disclose, or even suggest, all of the features included in claim 16. As such, it is respectfully submitted that Usami et al. does not anticipate claim 16.

As for claims 17, 22, and 23, which ultimately depend from and therefore include all of the features included in claim 16, it is respectfully submitted that Usami et al. does not anticipate these dependent claims for at least the same reasons more fully set forth above.

In view of all the foregoing, withdrawal of this rejection is respectfully requested.

### **III. Rejection of Claims 18 to 21, and 26 to 30 Under 35 U.S.C. § 103(a)**

Claims 18 to 21, and 26 to 30 were rejected under 35 U.S.C. § 103(a) as unpatentable over Usami et al. It is respectfully submitted that Usami et al. does not render unpatentable the presently pending claims for at least the following reasons.

Claims 18 to 21, and 26 to 30 ultimately depend from claim 16. As more fully set forth above, Usami et al. does not disclose, or even suggest, the features of *a second cavity formed in the solid electrolyte body on an opposite side of the solid electrolyte body from the first cavity, the electrical resistance heater being situated between the first cavity and the second cavity.*

Accordingly, it is respectfully submitted that Usami et al. does not disclose, or even suggest, all of the features included in claim 16, from which claims 18 to 21, and 26 to 30 ultimately depend. As such, it is respectfully submitted that Usami et al. does not render unpatentable claims 18 to 21, and 26 to 30, which ultimately depend from claim 16.

In view of all of the foregoing, withdrawal of this rejection is respectfully requested.

### **IV. Rejection of Claims 24 and 25 Under 35 U.S.C. § 103(a)**

Claims 24 and 25 were rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Usami et al. and U.S. Patent No. 6,652,987 ("Allen et al."). It is respectfully submitted that the combination of Usami et al. and Allen et al. does not render unpatentable the present claim for at least the following reasons.

Claims 24 and 25 ultimately depend from claim 16. As more fully set forth above, Usami et al. does not disclose, or even suggest, all of the features included in claim 16. Allen et al. also does not disclose, or even suggest, all of the features included in claim 16, and thus, fails to cure this critical deficiency.

Accordingly, it is respectfully submitted that the combination of Usami et al. and Allen et al. does not disclose, or even suggest, all of the features included in claim 16, from which claims 24 and 25 ultimately depend. As such, it is respectfully submitted that the combination of Usami et al. and Allen et al. does not render unpatentable claims 24 and 25, which ultimately depend from claim 16.

In view of all of the foregoing, withdrawal of this rejection is respectfully requested.

**V. Conclusion**

It is therefore respectfully submitted that all of the presently pending claims are allowable. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

/Clifford A. Ulrich/

Dated: January 25, 2010

By Clifford A. Ulrich, Reg. No. 42,194 for  
Gerard A. Messina (Reg. No. 35,952)

KENYON & KENYON LLP  
One Broadway  
New York, NY 10004  
(212) 425-7200

**CUSTOMER NO. 26646**